

Amendments To The Claims:

1-6. (canceled)

7. (currently amended) The method of claim 10 ~~gas chromatograph in accordance with claim 6,~~ wherein the step of detecting the separated materials by the detector includes providing a detector which comprises a measurement path through which the substance mixture passes of which ~~the~~ cross-sectional dimensions at least approximately correspond to ~~the~~ cross-sectional dimensions of the separation device.

8. (currently amended) The method of claim 10 ~~gas chromatograph in accordance with claim 7,~~ wherein the step of detecting the separated materials by the detector is includes providing a heat conductivity detector.

9. (currently amended) The ~~gas chromatograph in accordance with~~ method of claim 8, wherein the step of providing the heat conductivity detector comprises providing heat resistors arranged in a bridge circuit, wherein two heat resistors lie diagonally opposite one another in two different halves of the bridge circuit being arranged in the measurement path.

10. (previously presented) A method for gas chromatographic analysis of a substance mixture, the method comprising:

directing the substance mixture for separation of the materials contained within it by means of a carrier gas through a separation device at the output of which the materials spatially separated in groups are introduced for quantitative determination via a controllable inlet valve into a mass spectrometer, there being an alternate outlet for release of the carrier gas; and

detecting the separated materials by a detector arranged in-line between the output of the separation device and the inlet valve and, as a function of the detection, the inlet valve being controlled for introduction of all detected materials into the mass spectrometer, the inlet valve and alternate outlet otherwise controlled to admit all carrier gas into the alternate outlet instead of the mass spectrometer.

11. (canceled)